



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/723,702	11/26/2003	Andreas Blumenthal	13913-152001 / 2003P00554	7828
32864	7590	04/09/2007	EXAMINER	
FISH & RICHARDSON, P.C. PO BOX 1022 MINNEAPOLIS, MN 55440-1022			INGBERG, TODD D	
			ART UNIT	PAPER NUMBER
			2193	
SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE		
3 MONTHS	04/09/2007	PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

HIT

Office Action Summary	Application No.	Applicant(s)	
	10/723,702	BLUMENTHAL ET AL.	
	Examiner Todd Ingberg	Art Unit 2193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 09 July 2004.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-35 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-35 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 09 July 2004 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1 – 35 have been examined.

Drawings

1. The drawings filed November 26, 2003 have been accepted.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 15 - 35 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The current focus of the Patent Office in regard to statutory inventions under 35 U.S.C. § 101 for method claims and claims that recite a judicial exception (software) is that the claimed invention recite a practical application. Practical application can be provided by a physical transformation or a tangible result. No physical transformation is recited and additionally, the final result of the claim is conditional switch for test and production environment which is not a tangible result because the result is not clearly and concisely claimed to be tangibly embodied on a computer readable medium. The following link on the World Wide Web is for the United States Patent And Trademark Office (USPTO) policy on 35 U.S.C. §101.

<http://www.uspto.gov/web/offices/pac/dapp/opla/preognnotice/guidelines101_20051026.pdf>

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1 – 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Borland C++ 3.0, Tools & Utilities (referred to as C++) 1991, in view of Code Complete, Steve McConnell, 1993 (referred to as CC).

Claim 1

C++ and CC teach a method comprising: providing a common source code unit including production source code and test source code (C++, pages 38-41 and CC, page 99), the test source code having test methods for testing the production source code; producing executable production code from the production source code and executable test code from the test source code; and providing a global switch (CC, page 99, Debug) specifying whether to load the executable test code with the executable production code into a production environment. (CC, page 103). Both C++ and CC, teach the use of compiler directives and conditional assembly. It is CC that teaches the use of conditional compilation in the test and production code environments. Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of C++ and CC because conditional compilation provides the ability to use a variable and ensure the code resulting from the compilation is test or production code resulting in a common source code file that produces two different executables.

Note: Claims read on well known conditional compilation found in ANSI C and ANSI C++.

Claim 2

The method of claim 1 further comprising: loading the executable production code in the production environment without the executable test code in response to a setting of the global switch. (CC, page 99, Debug)

Claim 3

The method of claim 1 further comprising: executing the executable production code in a development environment; and loading the executable test code with the executable production code in the development environment in response to a setting of the global switch. (As per claim 2 – setting Debug On and Off).

Claim 4

The method of claim 1 further comprising: executing the executable production code in the production environment; loading the executable production code in the production environment without the executable test code in response to a setting of the global switch; changing the setting to specify that the executable test code is to be loaded with the executable production code in the production environment; and loading the executable test code with the executable production code in the production environment, in response to the changed setting. As per claim 3.

Claim 5

The method of claim 1 wherein the production source code and the test source code are generated using at least one of a procedural programming language including one of C, Fortran and Pascal, an object oriented programming language including at least one of a advanced business application program language (ABAP), Java programming language, C++ programming language and C# programming language. (C++, Borland C++ compiler as per claim 1).

Claim 6

The method of claim 1 further comprising checking static references from the production source code to the test source code. C++, page 22-24.

Claim 7

The method of claim 1 further comprising checking dynamic references from the executable production code to the executable test code. C++, pages 25-28 top.

Claim 8

The method of claim 1 wherein the executable production code and executable test source code is produced using a compiler. C++ - Borland C++ compiler.

Claim 9

The method of claim 1 wherein the test source code has access to a functionality of the production source code. Same source code as taught in claim 1 – access using text editor.

Claim 10

The method of claim 1 further comprising synchronizing changes to the test source code and the production source code. Text editor of claim 9.

Claim 11

The method of claim 1 wherein the production source code and test source code are implemented in a unit test environment. CC, page 100 – test in example

Claim 12

The method of claim 1 wherein the common source unit includes production source code and test source code sharing a same compilation unit. C++ - Borland C++ compiler.

Claim 13

Art Unit: 2193

The method of claim 1 wherein the common compilation unit includes executable production code and executable test code sharing a same compilation unit. C++ - Borland C++ compiler in the conditional compilation as taught by C++ and CC – claim 1 and claim 5

Claim 14

The method of claim I wherein the test method includes test assertion methods providing instructions for verifying an expected state of production source code. CC, page 95 and C++, page 38,

Claim 15

A computer system comprising: a common source unit having production source code and test source code with test methods for testing the production source code; and a means for producing a common compilation unit having executable production code based on the production source code and executable test code based on the test class source code or only the executable production code in response to a value of a system global switch. See the rejection for claim 1.

Claim 16

The system of claim 15 further comprising a means for: executing the executable production code in the production environment; and loading the executable production code in the production environment, without loading the executable test code, in response to the value of the global switch. See the rejection for claim 2.

Claim 17

The system of claim 15 further comprising a means for: executing the executable production code in a development environment; and loading the executable test code with the executable production code in the development environment, in response to the value of the global switch. See the rejection for claim 3.

Claim 18

The system of claim 15 further comprising a means for: executing the executable production code in the production environment; loading the executable production code in the production environment, without loading the executable test code, in response to the value of the global switch; changing the value of the global switch to specify that the executable test code is to be loaded with the executable production code in the production environment; and loading the executable test code with the executable production code in the production environment, in response to the changed value of the global switch. See the rejection for claim 4.

Claim 19

The system of claim 15 wherein the production source code and/or the test source code are generated using at least one of a procedural programming language including one of C, Fortran and Pascal, an object oriented programming language including at least one of a advanced business application program language (ABAP), Java programming language, and C++ programming language and C# programming language. See the rejection for claim 5.

Art Unit: 2193

Claim 20

The system of claim 15 further comprising a means for checking static references from the production source code to the test source code. See the rejection for claim 6.

Claim 21

The system of claim 15 further comprising a means for checking dynamic references from the executable production code to the executable test code. See the rejection for claim 7.

Claim 22

The system of claim 15 wherein the executable production code and/or executable test source code is produced using a compiler. See the rejection for claim 8.

Claim 23

The system of claim 15 wherein the test source code has access to a functionality of the production source code. See the rejection for claim 8.

Claim 24

The system of claim 15 further comprising a means for synchronizing changes to the test source code and the production source code. See the rejection for claim 9.

Claim 25

The system of claim 15 wherein the production source code and test source code are implemented in a unit test environment. See the rejection for claim 10.

Claim 26

The system of claim 15 wherein the common source unit includes production source code and test source code share a same compilation unit. See the rejection for claim 11.

Claim 27

The system of claim 15 wherein the common compilation unit includes executable production code and executable test code sharing a same compilation unit. See the rejection for claim 12.

Claim 28

The system of claim 15 wherein the test method includes test assertion methods providing instructions for verifying an expected state of production source code. See the rejection for claim 14.

Claim 29

A method comprising the steps of a step of providing a common source unit having production source code and test source code, the test source code having test methods for testing the production source code; a step of producing executable production code based on the production source code and executable test code based on the test source code; and a step of providing a global switch specifying whether to load the executable test code with the executable production code in a production environment. See the rejection for claim 1.

Claim 30

The method of claim 29 further comprising the steps of a step of executing the executable production code in the production environment; and a step of loading the executable production code in the production environment, without loading the executable test code in response to the global switch. See the rejection for claim 2.

Claim 31

The method of claim 29 further comprising the steps of a step of executing the executable production code in a development environment; and a step of loading the executable test code with the executable production code in the development environment, in response to the global switch. See the rejection for claim 3.

Claim 32

The method of claim 29 further comprising the steps of a step of executing the executable production code in the production environment; a step of loading the executable production code in the production environment, without loading the executable test code, in response to the global switch; a step of changing the global switch to specify that the executable test code is to be loaded with the executable production code in the production environment; and a step of loading the executable test code with the executable production code in the production environment, in response to the changed global switch. See the rejection for claim 4.

Claim 33

The method of claim 29 further comprising the step of checking static references from the production source code to the test source code. See the rejection for claim 6.

Claim 34

The method of claim 29 further comprising the step of checking dynamic references from the executable production code to the executable test code. See the rejection for claim 7.

Claim 35

The method of claim 29 further comprising the step of synchronizing changes to the test source code and the production source code. See the rejection for claim 10.

Examiner's Comment

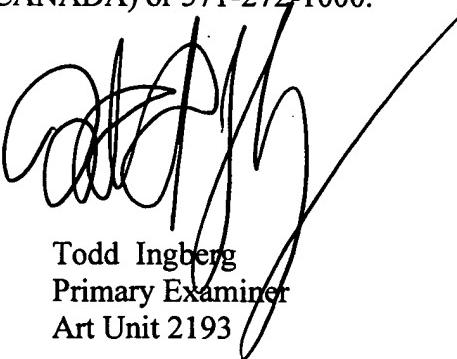
5. Current, claim language is so broad it reads on the basics of a programming environment that supports preprocessor directives. For example, "synchronization" as claimed can be performed with a test editor.

Correspondence Information

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Todd Ingberg whose telephone number is (571) 272-3723. The examiner can normally be reached on during the work week.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Todd Ingberg
Primary Examiner
Art Unit 2193